

“Time to sell the Double-Wide and Buy a Winnebago?”

The identification of Unsustainable Asset Price Movements

The answer to the rhetorical title is a definite “YES” for no other reason than Berkshire Hathaway Inc. said it will acquire Indiana recreation-vehicle manufacturer Forest River Inc.

This presentation is an informal discussion of the relationships between housing prices, - housing bubble - interest rates, Treasury bonds, loanable funds, US savings, foreign saving and the balance of trade. How this relates to the price of doublewide trailers and recreation-vehicle is the expectation that housing prices will decline and so will the price of other commodities as interest rates increase. Picking the peak of the real estate market or any financial trend is extremely difficult especially when there are rational economic agents who deny a bubble exists. Has the increase in housing prices been unusual and is the momentum sustainable? Is the increase the result of excessive loanable funds –liquidity- in the market or is there a more complex process at work? The answers to these questions depend in part on the link between an asset's price and some estimate of its "fundamental" value. Not all instances in which asset prices are increasing quickly under easy monetary conditions are indications of pending problems. Some are quite benign and even signal a healthy economy. Identifying price movements becomes even more difficult in the current changing environment. Some patterns of asset price changes that are attributed to excess liquidity are really the result of other structural changes and indications of unidentified pending problems.

The principle idea of this presentation is that financial globalization is changing the links between asset prices and liquidity. Movements in asset prices across countries now appear to be more synchronized than in the past. This synchronization is reflected in the increase in the US housing market and relatively high levels of liquidity despite low domestic saving rates. National economies have become more closely integrated through trade and investment, producing in turn a greater dependence in asset markets. Global shocks, like higher oil prices and geopolitical risk factors that produce broadly similar effects on most economies, have become more prevalent and tend to dominate idiosyncratic national shocks. But it also is quite possible that greater international diversification of portfolios now allows developments affecting assets in one country to spill over into the markets of others at the level of particular industries. If synchronization of asset price movements comes about mainly in this way, the suggestion is that excess liquidity in one country could move asset prices in another country and that appears to be the case with the current price of houses in some parts of the United States. However, higher housing prices are not an isolated event limited to the United States; the world real estate housing market has also been increasing. The US housing market ranks fifth in term of recent increases and eighth for longer term growth.

Real Estate Growth Rates

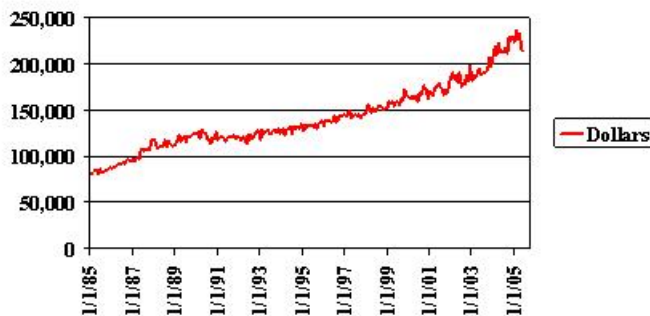
Long Term Growth

Britain	+3.6%
Spain	+3.6
Netherlands	+2.9
Australia	+2.7
Italy	+2.3
France	+1.7
Denmark	+1.5
United States	+1.3
Japan	+0.6
New Zealand	+0.5

Short Term Growth

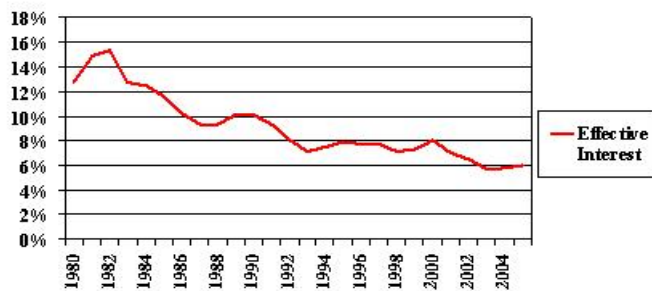
Britain	+13.8%
Spain	+17.2
Netherlands	+10.8
Australia	+8.2
Italy	+9.7
France	+14.7
Denmark	+7.3
United States	+13.0
Japan	-6.4
New Zealand	+16.4

Median Price of Houses Actually Sold including Land Price



home prices had set a record at \$232,600 in April of this year. The weakness in prices during the last two months could be a favorable development slowing the bubble that was developing in housing as speculative fever was driving home prices to unsustainable levels similar to the stock market bubble which burst in early 2000. The peak for home sales and prices should be reached when mortgage rates start to rise.

Conventional Single-Family Mortgage



There is an inverse relationship between the interest rate and the quantity of loanable funds demanded. However the supply of domestic loanable funds has remained relatively small yet mortgage interest rates have remained low.

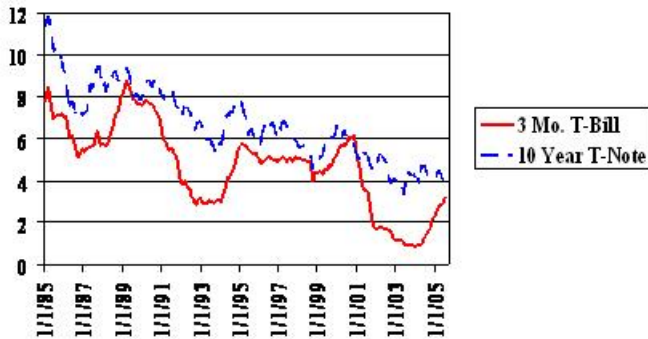
The Federal Reserve only directly controls the discount rate, but the Federal Reserve has a measure of control over short-term interest rates through monetary policy actions by setting the discount rate, the targeted Federal funds rate and open market operations. The Federal Reserve Board Open Market Committee's decision to hike the targeted Federal funds rate nine times in quarter-point increments over the past 14 months from 1 percent to 3.25 percent has caused other short-term rates to rise as well. The prime rate tends to move in tandem with changes in the targeted fed funds rate and now stands at 6.25 percent.

On July 27, 2005, the US Commerce Department reported that new single-family homes were sold at an annual rate of 1.37 million units during June, up four percent from the previous record of a 1.32 million sales pace set in May. Sales of existing homes also set a record in June as the housing industry continues to be powered by low mortgage rates. The Commerce Department also reported that the median price of a new home fell for a second month, dropping by 5.5 percent in June to \$214,800. The 5.5 percent decline in the median sales price, the point where half the homes sold for more and half for less, followed a 2.2 percent drop in new home prices in May. New

home prices had set a record at \$232,600 in April of this year. The weakness in prices during the last two months could be a favorable development slowing the bubble that was developing in housing as speculative fever was driving home prices to unsustainable levels similar to the stock market bubble which burst in early 2000. The peak for home sales and prices should be reached when mortgage rates start to rise.

There are several supportive factors for the higher housing prices in the US including the qualified mortgage interest tax deduction and the non recognition of housing capital gain. A primary reason for the strong demand for houses is the level of interest rates. The loanable funds theory of interest rate determination states that the general level of interest rates is determined primarily by demand and supply for loanable funds. Households demand loanable funds to finance housing, automobiles and household items. These purchases result in installment debt. Installment debt increases with the level of income.

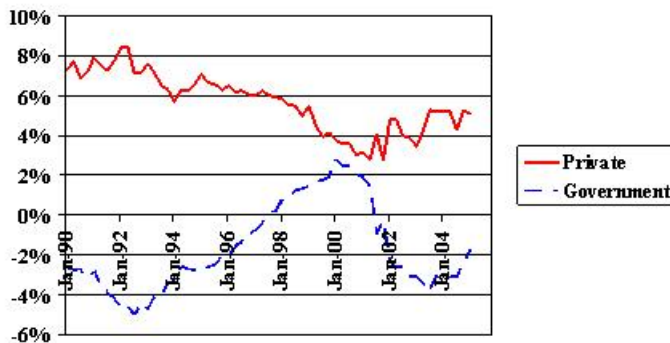
Interest Rates: 1985 - 2005



For many decades, world monetary policy was determined in Washington DC. When the Federal Reserve raised interest rates, global monetary conditions would tighten. Today, however, thanks in part to China's and other East Asian banks purchases of T-bonds, low long-term bond yields have offset the rise in American short-term interest rates over the past year. The yield on ten-year bonds is currently lower than before the Federal Reserve started to lift interest rates in June 2004. America's sovereignty over its monetary policy has therefore been eroded, with a given rise in short-term rates producing much less monetary tightening than in the

past. To that extent, global monetary policy is increasingly being set in East Asia as well as in Washington.

Net Savings as a percent of GDP



By helping to hold down interest rates in rich economies, China and other East Asian Banks may have indirectly created a global liquidity bubble. Total global liquidity during the last eighteen months is estimated to have risen at its fastest pace in three decades after adjusting for inflation. This excess liquidity has not pushed up conventional inflation (thanks to cheap Chinese clothes and computers) but instead, it has inflated a series of asset-price bubbles around the world. Thus, pushing this argument to its limit, it could be said that the global housing boom is indirectly "made in China". Not only has China played

a role in holding down short-term interest rates, but the People's Bank of China has also supported America's mortgage market by buying vast amounts of mortgage-backed securities.

In a closed economy, the demand for loanable funds must equal the supply of loanable funds

$$S = I + (G - T)$$

S = Private Savings

I = Private Investment

G = Government consumption-expenditure

T = Taxes

(G-T) = Government Deficit/Surplus

May 2005 Savings

Savings: Current income which is deferred for future consumption (i.e., not spent)

May 2005 Personal Income: \$10,243.5 B

(Dividend Payments, Interest, Gov't Transfers, etc.)

- Taxes: \$1,199.7 B

- = Disposable Personal Income: \$9,043.8 B
- Personal Consumption Expenditures: \$8,657.2 B
- = Personal Savings: \$55.4B (0.6% of Personal Income)

The savings rate in the United States is one of the lowest for any developed country in the world. If the rate of personal savings during the first quarter of calendar 2005 is projected forward, approximately one percent of income will be saved during 2005. That is the lowest saving rate in relevant history. The U.S. consumption and other components of expenditure have been growing faster than U.S. income in the last decade. The difference between what is produced in the United States and what is consumed has been borrowed from the rest of the world.

Savings, Investment, and the Trade Balance

GDP = consumer expenditures + investment + government purchases of goods and services + net exports (domestic absorption)

$$GDP = C + I + G + NX$$

C - Consumer expenditures

I - Investment

G - Government purchases of goods and services

NX - Net exports

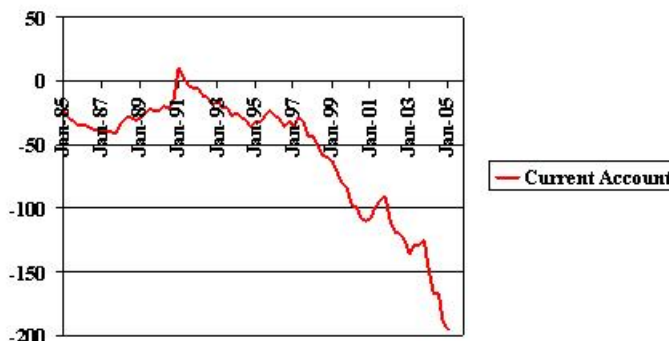
X - Exports

M - Imports

2004 Gross Domestic Production

	Billions	Share of GDP
GDP	\$11,735.0	100.0%
C – Consumption	\$ 8,229.9	70.1%
I - Gross Private Domestic Investment	\$ 1,927.3	16.4%
G - Government Consumption	\$ 2,183.9	18.6%
NX - Net Exports of Goods and Services	\$ -606.2	-5.1%
Net Factor Incomes from abroad	\$ +43.9	
GNP	\$11,778.9	

US Balance of Payments



Anything that we in the United States buy or sell to the rest of the world has to be paid for. The current account (CA) tracks the flow of goods and services between the US and the rest of the world. In addition to net exports and the net factor income from abroad, the CA includes also another item, the net Unilateral Transfers. These are the gifts and grants that the country received or gave to the rest of the world.

The US Current Account: 2004
(in Millions of \$s)

Exports of Goods, Services, and Income	
Goods:	\$ 807,536
Services:	\$ 343,912
Income Receipts:	
Investment Receipts:	\$ 379,527
Employee Compensation:	\$ 3,038
Imports of Goods, Services and Income	
Goods:	-\$1,472,926
Services:	-\$ 296,105
Income Receipts:	
Investment Receipts:	-\$ 340,255
Employee Compensation:	-\$ 8,833
Net Unilateral Transfers:	-\$ 80,930
Current Account :	-\$ 668,074

The US Current Account:
Jan-Mar 2005 (in Millions of \$s)

Exports of Goods, Services, and Income	
Goods:	\$ 213,840
Services:	\$ 93,849
Income Receipts:	
Investment Receipts:	\$ 105,242
Employee Compensation:	\$ 744
Imports of Goods, Services and Income	
Goods:	-\$ 400,169
Services:	-\$ 79,277
Income Receipts:	
Investment Receipts:	-\$ 100,060
Employee Compensation:	-\$ 2,149
Net Unilateral Transfers:	-\$ 27,072
Current Account :	-\$ 195,052

The current account measures the flow of cash arising from trade and transfers. It also measures, indirectly, the economy's international financing requirement. The point is that the cash flows measured by the current account are mirrored by equal and offsetting financial cash flows, which we refer to as the capital account and financial account (KFA).

2004 (in Millions of \$s)

Capital Account:	-\$ 1,648
US Owned Assets Abroad (Increase/Financial Outflow (-))	
US Official Reserve Assets:	\$ 2,805
US Government Assets:	\$ 1,215
US Private Assets:	-\$ 859,529
Foreign Owned Assets in the US (Increase/Financial inflow (+))	
Foreign Official Assets in the US:	\$ 394,710
Foreign Private Assets in the US:	\$ 1,045,395
Capital And Financial Account:	\$ 582,948

The US Capital & Financial Account:
Jan-Mar 2005 (in Millions of \$s)

Capital Account:	-\$ 4,456
US Owned Assets Abroad (Increase/Financial Outflow (-))	
US Official Reserve Assets:	\$ 5,331
US Government Assets:	\$ 4,543
US Private Assets:	-\$ 70,560

Foreign Owned Assets in the US (Increase/Financial inflow (+))

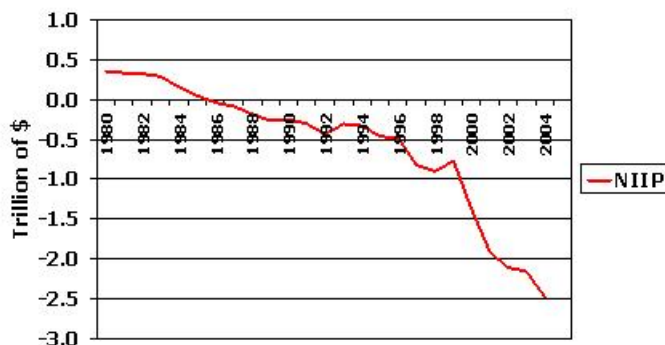
Foreign Official Assets in the US:	\$ 24,730
Foreign Private Assets in the US:	\$ 201,348
Capital And Financial Account:	\$ 160,936

$$CA + KFA = -\$195,052 + \$160,936 = -\$34,116$$

The U.S. trade deficit is the counterpart to low U.S. savings. In the mid to late 1990s, the current account deficits - the gap between what the United States earns abroad and what it spends abroad in a year - reflected a combination of low private savings and strong private investment, not large budget deficits. The financial resources needed to support a surge in private investment were imported from abroad, allowing both consumption and investment to rise. Since 2001, however, the current account deficit has reflected a widening government deficit, not strong private investment. The U.S. now borrows from abroad to allow the government to run a large fiscal deficit without crowding out private investment, even as growing consumption (and necessarily, very low private savings) reduce the United States' ability to finance the fiscal deficit and private investment domestically.

The U.S. current account deficit is on track to reach seven percent of GDP in 2005. That figure is unprecedented for a major economy. During 2004, foreigners bought approximately \$900 billion in U.S. long-term bonds; the United States exported a dollar of debt for every dollar of goods it sold abroad. Looking ahead, the U.S. debt position will only get worse. As external debt grows, interest payments on the debt will rise. The current account deficit will continue to grow on the back of higher and higher payments on U.S. foreign debt even if the trade deficit stabilizes. That is why sustained trade deficits will set off the kind of explosive debt dynamics that lead to financial crises.

Net International Investment Position



Large continuing trade deficits have to be financed by borrowing from abroad (or by foreign direct investment or net foreign purchases of U.S. stocks). Sustained deficits have made the United States a major net debtor. The broadest measure of the amount the United States owes the rest of the world – the net international investment position (NIIP) – has gone from negative \$135 billion in 1994 to negative \$2.5 trillion in 2004. At the end of 2005, I estimate the net international position will be negative \$3 trillion. Relative to GDP, net debt rose from 5% of GDP in 1994 to 21% of GDP at the end of 2004 and could rise to 26% of GDP by the end of 2005. Trends are no

more encouraging when U.S. external debt is assessed in relation to U.S. export revenues. Exports as a share of GDP dipped a bit during the Asian crisis but then recovered and stood at 11% of GDP in 2001. But exports then dropped dramatically between 2001 and 2003, falling to a low of 9.5% of GDP in 2004 before starting to recover during this year. Rising external debt and falling exports is never a good combination. At an estimated 280% of exports at the end of 2005, U.S. debt to export ratio is in shooting range of troubled Latin American economies like Brazil and Argentina.

A large and rapidly growing stock of external debt – the legacy of our past current account deficits - has not, to date, been much of a burden on the U.S. economy. The U.S. had no problem adding to its external debt stock to finance ongoing current account deficits. Interest payments on existing external debt have not been a burden on the U.S. economy. The United States has lots of external assets as

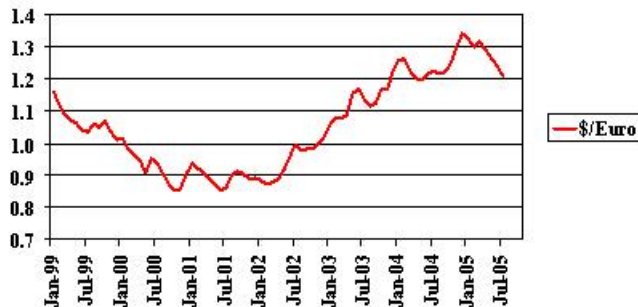
well as lots of external liabilities. Since U.S. assets have so far had a higher rate of return than U.S. liabilities, the U.S. earned more on its assets than it paid on its liabilities in 2003 and 2004.

What does the breaking of the yuan's peg to the dollar mean for US Treasuries and bond yields? American Treasury yields rose by 12 basis points immediately after Beijing made its announcement last week. Having played a hand in inflating America's housing bubble, could China now prick it by pushing up mortgage rates, which are closely tied to long-term bond yields?

If abandoning its dollar peg causes China to reduce its purchases of T-bonds, then yields will rise. But this depends on several unknowns. For example, will late July's revaluation reduce inflows of speculative capital into China, and thereby reduce its need to intervene in the foreign-exchange market by buying dollars? A large chunk of China's foreign-exchange intervention over the past year has been to offset not its current-account surplus but inflows of hot money. Some economists believe that, in the short term, the small revaluation will intensify speculation of further revaluations and so attract even more capital inflows, forcing the People's Bank of China to buy more Treasury bonds to stabilize its currency. If so, bond yields will remain low.

On the other hand, the switch from a dollar peg to a currency basket may cause China to diversify its reserves away from dollars. It is not likely to dump its dollars, but it will probably reduce its purchases of new Treasury bonds in favor of other currencies. If China really has broken the yuan's link with the dollar, then this could be the trigger for another general slide in the greenback against the euro, the yen and other currencies, prompting investors to demand higher yields. The fate of American house prices could thus be determined by unelected bureaucrats in Beijing rather than the unelected central bankers of the West.

The Dollar vs. The Euro



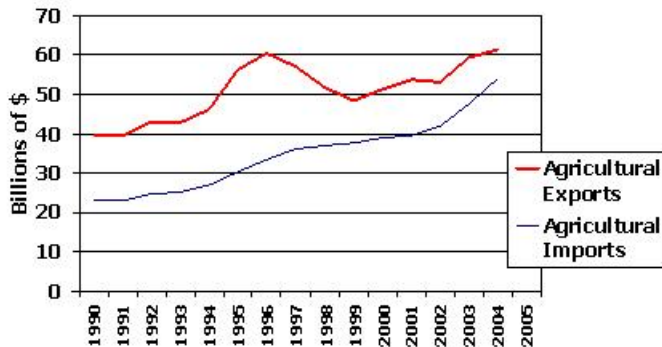
The Peoples Bank of China (PBoC), after keeping the yuan virtually fixed near 8.28 per dollar since 1996, in late July adjusted the currency's value to 8.11 and will set it from now on to a basket of currencies of China's main trading partners. The central bank said the yuan would be allowed to move in a tight range of 0.3 percent up or down from the previous day's close -- the same flexibility China has had, but chosen not to use, since it adopted a "managed float" policy in 1994. The Japanese yen leapt 2 percent on speculation other Asian governments, afraid until now of giving China a competitive edge, would let their currencies rise on the yuan's coattails. Malaysia promptly

did just that, scrapping the peg that had frozen the ringgit since 1998 and switching like China to a managed float.

The real estate complex has been the most robust segment of the U.S. economy. If the Chinese can succeed (where the Fed failed) in raising U.S. long term rates, the strongest part of the US economy is at risk. While we know real estate had to slow eventually, the question is how fast will it occur, and how dramatically?

US Consumers have grown reliant on ultra low interest rates and ultra inexpensive imported goods. The de-pegging of the yuan could cause incremental increases in costs, while raising longer term interest rates. This will negatively impact Wal-Mart, the largest importer of Chinese manufactured products, as well as other Chinese goods resellers.

US Trade Accounts



The United States Dollar is the default currency of the world. That gives an unprecedented amount of flexibility to US policy makers. Is the de-pegging the beginning of the end for this global currency structure? It's too soon to tell. But we wonder how this might play out elsewhere. What now becomes significant is the basket of currencies to which the yuan will become ever more pegged. A likely composition will reflect a basket of currencies in proportion to China's external trade.

This presentation has argued that financial globalization is changing the links between asset prices and liquidity. Movements in asset prices across countries are now much

more coordinated than in the past because of the integrated world economy. US housing prices, interest rates, bond yields, and commodity prices are being increasingly influenced by decisions in China and other East Asian banks. This is an important economic change that could affect the world for at least half a century and its effect could last for another couple of decades. The change creates immense opportunities, especially for American Agriculture. Eventually, the United States will have to bring its current account into line and that will require an increase in exports and a decrease in imports. By some estimates, China has almost 200 million underemployed workers in rural areas, and it could take at least two decades for them to be absorbed by industry. Richard Freeman argues that there will be a "doubling" or more of the global labor supply from the integration of China, India and the former Soviet Union into the world economy. As this process takes place, China will need to import increasing quantities of feed and food grains and animal protein. The United States cannot compete with China in terms of labor intensive production. However the United States has a complete advantage in term of grain and livestock production.

Interest Rate Forecast

CME Eurodollar

